

### **AMENDMENTS TO THE DRAWINGS**

Please amend Figure 28 to replace reference numeral 1140 with reference numeral 1040. The drawing amendments are described in the application as originally filed and discussed below. No new matter has been added. A clean drawing sheet is provided herewith.

## REMARKS / ARGUMENTS

### Status of Claims

Claims 1-20 are pending in the application. Claims 1, 2, 5, and 12 stand rejected. Claims 3, 4, 6-11, 13, 14 are objected to as being dependent upon a rejected claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's comments regarding the allowability of the noted claims. Applicant presents comments herein for consideration by the Examiner to traverse the present rejections. No claim amendments have been made, and therefore under 37 CFR 1.121, no claim listing is provided herewith.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

### Amendments to the Drawings

Applicant has amended Figure 28 to replace reference numeral 1140 with reference numeral 1040, thereby correcting an obvious typographical error. Figure 28 and reference numeral 1040 are discussed in the application as originally filed at Paragraph [0081].

### Rejections Under 35 U.S.C. §102(a)

Claims 1, 2, 5 & 12 stand rejected under 35 U.S.C. §102(a) as being anticipated by Masataka et al., Japan Patent Application No. 2002-26560 (hereinafter Masataka).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he

identical invention must be shown in as complete detail as is contained in the \*\*\* claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements “arranged as in the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Regarding Claim 1

Claim 1 recites, inter alia,

“...*a heat exchanger* in fluid communication with said turbomachine and *arranged for being thermally coupled to the high power density device*; and *a transition duct arranged intermediate said heat exchanger and said inlet for funneling air flow from said heat exchanger to said turbomachine.*”

Dependent claims inherit all of the limitations of the parent claim.

In alleging anticipation, the Examiner alleges that Masataka anticipates each and every element of the claimed invention arranged as claimed. Paper 06232005, page 2.

Applicant respectfully disagrees with the Examiner.

More specifically, Applicant respectfully submits that the Examiner, while alleging anticipation, has not shown with specificity where Masataka discloses “...*a heat exchanger* in fluid communication with said turbomachine and *arranged for being thermally coupled to the high power density device*; and *a transition duct arranged intermediate said heat exchanger and said inlet for funneling air flow from said heat exchanger to said turbomachine.*”

The translated Abstract of Masataka, provided by MicroPatent®, states:

“PROBLEM TO BE SOLVED: To provide an electronic device cooling unit capable of improving the flow of air to which the heat of an electronic device is transmitted.

SOLUTION: The electronic device cooling unit of the type, in which the heat of an electronic device 3 provided in the inside A1 of a casing 1 is radiated into the air in the inside A1 of the casing 1 to cause the flow of air to thereby discharge the air to the outside B1 of the casing 1, is provided with a heat radiating air compressor K1 for compressing air to which the heat of the electronic device 3 is transmitted. “

In Figure 2 of Masataka, Applicant finds electronic device 3 arranged to be thermally coupled to the compressor K1.

Here, Applicant finds a compressor (*not a heat exchanger as claimed*) to be thermally coupled to the high power density device, which is contrary to the claimed invention.

Also, it appears to Applicant that the Examiner is relying on the heat radiating air compressor K1 of Masataka to satisfy all of the elements of the turbomachine, the heat exchanger, and the transition duct, of the claimed invention. If Applicant were to accept the Examiner's interpretation of Masataka, then Applicant submits that Masataka is absent *a transition duct arranged intermediate said heat exchanger and said inlet for funneling air flow from said heat exchanger to said turbomachine*. Stated another way, if Applicant were to accept the Examiner's interpretation of Masataka, then Applicant submits that Masataka is being used to show disclosure of the *compressor K1 (transition duct) arranged intermediate the compressor K1 (heat exchanger) and the compressor K1 (inlet of the turbomachine housing)*. From the foregoing, it is unclear to Applicant how the Masataka compressor K1 can be disposed intermediate the compressor K1 and the compressor K1, which appears to be the outcome according to the Examiner's interpretation. If this is contrary to the Examiner's understanding, further clarification is respectfully requested.

In view of the foregoing, Applicant submits that Masataka does not disclose all of the claimed elements *arranged as in the claim*, and absent anticipatory disclosure in Masataka of each and every element of the claimed invention *arranged as in the claim*, Masataka cannot be anticipatory.

Regarding Claim 2 More Specifically

Claim 2 recites, inter alia,

“...wherein said heat exchanger comprises a porous medium having a plurality of *interconnected flow paths*.”

Applicant respectfully submits that in alleging anticipation, the Examiner has not shown with specificity where Masataka discloses the plurality of *interconnected flow paths*.

In Figure 1, Applicant finds Masataka to disclose a casing 1 having flow ports 2. However, Applicant does not find the flow ports 2 of Masataka to be *interconnected* flow paths.

Absent anticipatory disclosure of each and every element arranged as claimed, a prima facie case of anticipation cannot be established.

Regarding Claim 12

Claim 12 recites, inter alia,

“...*drawing* air through a porous medium using a turbomachine, the porous medium having a *plurality of interconnected flow paths* and arranged for being *thermally coupled to the high power density device*;

compressing the air at a turbocompressor of the turbomachine, the turbomachine having an overall dimension of *equal to or less than 1U*; and  
exhausting *the drawn* and compressed air.”

At the outset, Applicant would like to point out that the language of Claim 12 specifically includes the word “*drawing*”, which in its ordinary meaning, and as used, disclosed and illustrated in the application as filed, means “pulling”. Here, Applicant is not merely claiming any type of air movement, but is specifically claiming the drawing, or pulling, of air through a porous medium.

In comparing Masataka with the instant invention, Applicant finds the Masataka heat radiating air compressor K1 to be “pushing” or “blowing” the air through casing 1.

Where the instant invention discloses the turbomachine to be *downstream* of the porous medium, thereby resulting in the air being *drawn* through the porous medium,

Applicant finds Masataka to disclose the heat radiating air compressor K1 to be *upstream* of the casing 1, thereby resulting in the air being *blown* through the casing 1.

As a consequence, Applicant finds Masataka to be absent disclosure of the air being *drawn* through a porous medium.

Additionally, and as previously discussed, if the Examiner is alleging that the Masataka casing 1 is representative of the claimed porous medium, then Applicant finds Masataka to be absent disclosure of the porous medium having *a plurality of interconnected flow paths*, which is specifically claimed for in the instant invention.

Furthermore, Applicant does not find, and respectfully submits that the Examiner has not shown with any degree of specificity, where Masataka discloses the turbomachine having an overall dimension of *equal to or less than 1U*, which is specifically claimed for in the instant invention.

In view of the foregoing, Applicant submits that Masataka does not disclose all of the claimed elements arranged as in the claim, and absent anticipatory disclosure in Masataka of each and every element of the claimed invention arranged as in the claim, Masataka cannot be anticipatory.

In view of the foregoing remarks, Applicant submits that Masataka does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(a) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0868.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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